

Food Handlers Letter

The Route to Safer Fresh Fruits & Vegetables

Although fruits and vegetables are one of the healthiest food sources in our diet, we continue to have foodborne disease outbreaks of significance from produce, sometimes affecting large groups of people in multiple states because of their wide distribution. The CDC estimates that fresh produce now causes 12 percent of foodborne illness in the United States. Produce needs our continued food safety efforts at the restaurant level as well as at the stages in agricultural production. Occasionally, fresh fruits and vegetables can become contaminated with harmful bacteria or viruses, such as Salmonella, E. coli 0157:H7, Norovirus, and Hepatitis A. This contamination can occur at any point from the field to our table. If eaten, contaminated fruits and vegetables can cause foodborne illness.

How does produce become contaminated? Because most produce is grown in a natural environment, it is vulnerable to contamination with pathogens (disease causing microorganisms). Factors that may affect produce contamination include agricultural water quality, the use of manure as fertilizer, the presence of animals in fields or packing areas, and the health and hygiene of workers handling the produce during production, packing, processing, transportation, distribution, or preparation. The fact that produce is often consumed raw without any type of intervention that would reduce, control, or eliminate pathogens prior to consumption contributes to its potential as a source of foodborne illness. Recent notable outbreaks from produce involved tomatoes, sprouts, green onions, cut melons, parsley, lettuce, strawberries, and juices such as un-pasteurized apple cider and orange juice.

Safer storage, preparation & segregation --Although foodborne illness can be serious, there are several easy steps you can take in a food service kitchen to help keep fresh fruits and vegetables safe to eat.

- *Begin with clean hands.* Wash your hands with warm water and soap for 20 seconds before and after handling raw produce.
- *Store perishable fresh fruits and vegetables refrigerated* at 41°F or below, above and separated from raw meats, poultry, and seafood.
- *Cut away damaged or bruised areas* on produce before preparing and/or eating. Produce that looks rotten should be discarded.
- *Health risks of raw sprouts are significant* for high risk people (children, elderly, immune compromised). Contamination is on the seeds that the sprouts grow from. Bean, alfalfa, clover, or radish should be thoroughly cooked before eating.
- *Segregate fruits and vegetables* that will be eaten raw from other foods on prep tables—especially raw meat, poultry or seafood.

Wash it! Wash fruits and vegetables under running water, just before eating, cutting, or cooking.

- All produce should be *thoroughly washed before eating*. This includes produce grown organically, purchased from a food distributor, grocery store or farmers market. Even if you plan to peel the produce before eating, it is still important to wash it first.
- *Wash, rinse, and sanitize all countertops, cutting boards and utensils* (including fruit/vegetable brushes) with a mixture of 1 teaspoon chlorine bleach in 1 quart of water or run them through the dishwasher if they fit. Do this before and after preparing food.
- When washing fresh produce, *it is also important to have a clean sink*. Wash the sink with hot, soapy water and then rinse and sanitize it by pouring a mixture of 1 teaspoon of chlorine bleach in 1 quart of water into the sink.
- *Scrub firm produce* such as melons and cucumbers with a clean produce brush.
- *Drying produce* with a clean paper towel may further reduce bacteria that may be present.

What about pre-washed produce? Many produce items like lettuce are pre-washed and if so it will state it on the packaging. This can be used without further washing, but as an extra measure of caution, you can wash the produce again, just before using. If the bag was opened and partially used, wash the produce portion at the time of use.

For soft fruits and vegetables (tomatoes), gently rub them with your hands to loosen the dirt. Also remove the outer leaves of lettuce and cabbage before washing them. Tomatoes can be ripened at room temperature, but must be washed and then refrigerated when sliced.

To wash berries, parsley and greens, put them in a clean colander and spray them with a kitchen sink sprayer. Or, gently turn the produce as you hold it under running water. Be sure to turn and gently shake the colander as you wash the produce.

Some fruits and vegetables may have waxy coatings added to keep them fresh, to protect them from bruising and to prevent the growth of mold. Waxes also make fruits and vegetables more attractive. These waxes are safe to eat.

What about produce washes? On the market today are several products called produce washes. These products usually include substances such as phosphates, baking soda or citric acid. Some of these products may help remove additional dirt, pesticides and bacteria from fruits and vegetables. However, these products are expensive and they are not recommended by any federal agency to clean fresh produce.

Ethylene gas & produce—Some fruits and vegetables, like bananas and tomatoes, naturally produce ethylene gas when they ripen. Often they are harvested in the un-ripened state to preserve firmness and for longer shelf life. They are later exposed to ethylene gas to induce ripening by produce companies before shipping.

Bottom Line: *How can you as a manager help keep your produce safe? Recognize that some fruits and vegetables are potentially hazardous foods. Work with your suppliers to review sources of your produce, and to insist upon good agricultural practices. Encourage your staff to take the risks seriously and practice impeccable personal hygiene when handling fresh fruits and vegetables, as pathogens on human hands can contaminate these products. Wash fresh produce, but don't count on washing to remove all pathogens; it doesn't. Within your operation, be sure to store any chopped or prepped produce under refrigeration.*

Food Code Tips

Facts about the 2005 Food Code

Newly added, amended or redefined definitions:

“Handwashing Sink” (added)

1) means a lavatory, a basin or vessel for washing, a wash basin, or a plumbing fixture especially placed for use in personal hygiene and designed for the washing of the hands.

2) Includes an automatic handwashing facility

“Health practitioner” (added) means a physician licensed to practice medicine, or if allowed by law, a nurse practitioner, physician assistant, or similar medical professional.

“Juice” (Amended) – means

1) the aqueous liquids expressed or extracted from one or more fruits or vegetables, purees of the edible portions of one or more fruits or vegetables, or any concentrates of such liquid or puree.

2) “Juice” does not include, for the purposes of HACCP, liquids, purees, or concentrates that are not used as beverages or ingredients of beverages.

“Major Food Allergens”(added) means

1) Milk, egg, fish (such as bass, flounder, cod and including crustacean such as crab, lobster, or shrimp), tree nuts (such as almonds, pecans, or walnuts), wheat, peanuts, and soybeans; or

2) A food ingredient that contains protein derived from a food, as specified in Subparagraph (1)(a) of this definition.

3) “Major food allergen” does not include:

- a. Any highly refined oil derived from a food specified in Subparagraph (1)(a) of this definition and any ingredient derived from such highly refined oil; or
- b. Any ingredient that is exempt under the petition or notification process specified in the Food Allergen Labeling and Consumer Protection Act of 2005 (Public Law 108-282).

“Potentially Hazardous Food” (amended) (Time/Temperature Control for Safety Food)

1) “Potentially hazardous food (time/temperature control for safety food)” means a food that requires time/temperature control for safety (TCS) to limit pathogenic microorganism growth or toxin formation.

2) “Potentially hazardous food (time/temperature control for safety food)” includes:

- a. An animal food that is raw or heat treated; a plant food that is heat-treated or consists of raw seed sprouts, cut melons, or garlic-in-oil mixtures that are not modified in a way that results in mixtures that do not support pathogenic microorganism growth or toxin formation; and
- b. Except as specified in Subparagraph (3)(d) of this definition, a food is designated as Product Assessment Required (PA) based on the level of interaction of its a_w and pH values.

3) “Potentially hazardous food (time/temperature control for safety food)” does not include:

- a. An air cooled hard boiled egg with shell intact, or an egg with shell intact that is not hard boiled, but has been pasteurized to destroy all viable salmonellae;
- b. A food in an unopened hermetically sealed container that is commercially processed to achieve and maintain commercial sterility under conditions of non-refrigerated storage and distribution;
- c. A food that because of its pH or A_w value, or interaction of A_w and pH values, is designated as a non-PHF/non-TCS food
- d. A food that is designated as Product Assessment Required (PA) and has undergone a Product Assessment showing that the growth or toxin formation of pathogenic microorganisms that are reasonably likely to occur in that food is precluded due to:
 - - i. Intrinsic factors including added or natural characteristics of the food such as preservatives, antimicrobials, humectants, or acidulants or nutrients,
 - ii. Extrinsic factors including environmental or operational factors that affect the food such as packaging, modified atmosphere such as reduced oxygen packaging, shelf life and use, or temperature range of storage and use, of
 - iii. A combination of intrinsic or extrinsic factors; or
- e. A food that does not support the growth or toxin formation of pathogenic microorganisms in accordance with one of the Subparagraphs (3) (a) – (3) (d) of this definition even though the food may contain a pathogenic microorganism or chemical or physical contaminant at a level sufficient to cause illness or injury.

f. “**Ratite**” means a flightless bird such as an emu, ostrich or rhea.

This information is provided as a general guideline and is not intended to be, nor does it, constitute legal or regulatory advice. Additional Federal regulations may apply to your particular circumstances. State, regional and local laws, ordinances and regulations may also apply.

